DT07 Rr 'PCT/PTO 05 FEB 2003 Y 22

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Attorney's Docket No. C01005.70008.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Pykett, et al.

Serial No: Int. Appl. No.: 10/088,826

Int. Filing Date:

PCT/US00/26020 September 22, 2000

Conf. No.

5264

For:

METHODS AND DEVICES FOR OBTAINING NON-

HEMATOPOIETIC LINEAGE CELLS FRCM HEMATOPOIETIC

PROGENITOR CELLS

Examiner:

Not Yet Assigned

Art Unit:

Not Yet Assigned

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Box PCT, Commissioner for Patents, Washington, D.C. 20231, on January 203.

Maria A. Trevisan, Reg. No. 48,207

BOX PCT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

Sir:

Transmitted herewith are the following documents:

[X] Preliminary Amendment

[X] Statement Pursuant to 37 C.F.R. §1.821(f)

[X] Paper copy of Sequence Listing

[X] Sequence Listing in Computer Readable Form (1 diskette)

[X] Copy of Notification of Defective Response

[X] Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 720-3500, Boston, Massachusetts.

check is not enclosed. If a fee is required, the Commissioner is hereby authorized to charge eposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully Submitted

Maria A. Trevisan, Reg. No. 48,207 Wolf, Greenfield & Sacks, P.C.

600 Atlantic Avenue Boston, MA 02210

Docket No. C01005.70008.US Date: January 2, 2003

x02.21.03

Initials



### UNITED STATES PATENT AND TRADEMARK OFFICE

1)

Commissioner for Patents, Box PCT United States Patent and Trademerk Office Washington, IV.C. 2023 syrv.uspbi.gov

U.S. APPLICATION NUMBER NO.	EDST MAN GID A DRIVE OF THE STATE OF THE STA			
10/088,826	FIRST NAMED APPLICANT	ATTY	ATTY. DOCKET NO.	
	Mark J Pykett	C01	C01005/70008	
		INTERNATIONAL API	PLICATION NO.	
23628		PCT/US00/26020		
WOLF GREENFIELD & SACKS, PC	. [	I.A. FILING DATE	PRIORITY DATE	
FEDERAL RESERVE PLAZA 300 ATLANTIC AVENUE		09/22/2000	09/23/1999	

BOSTON, MA 02210-2211

**CONFIRMATION NO. 5264 371 FORMALITIES LETTER** \*OC000000009399959\*

Date Mailed: 01/21/2003

## NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Indication of Small Entity Status
- Priority Document
- Biochemical Sequence Listing
- Copy of IPE Report
- · Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Preliminary Amendments
- Request for Immediate Examination

File Folder DOCKETED **Docket Entr** JAN 28 2003 Docket Cross @# Order Copies **Annuities** Confirmation [

Applicant's response filed 08/13/2002 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 05/08/2002 have not been completed.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
  - A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).





# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10 088,826
Source:	PCTIO
Date Processed by STIC:	12/30/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or.
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">httm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- 3. Hand Carry directly to:
  - U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
  - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/088,826
ATTN: NEW RULES CASES	S: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
SVariable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PateniIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences(NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
10 V Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
! !	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
bug	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

## \*10088826\*

DATE: 12/30/2002

TIME: 08:53:20

PCT10

```
Input Set : A:\PTO.DC.txt
                      Output Set: N:\CRF4\12302002\J088826.raw
      3 <110> APPLICANT: Pykett, Mark
              Rosenzweig, Michael
               Banu, Naheed
      7 <120> TITLE OF INVENTION: METHODS AND DEVICES FOR OBTAINING NON-HEMATOPOIETIC LINEAGE
CELLS FROM
      8
               HEMATOPOIETIC PROGENITOR CELLS
     10 <130> FILE REFERENCE: C01005/70008
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/088,826
C--> 12 <141> CURRENT FILING DATE: 2002-03-22
     12 <150> PRIOR APPLICATION NUMBER: PCT/US00/26020
     13 <151> PRIOR FILING DATE: 2000-09-22
     15 <150> PRIOR APPLICATION NUMBER: US 60/156,031
     16 <151> PRIOR FILING DATE: 1999-09-23
     18 <150> PRIOR APPLICATION NUMBER: US 60/217,438
     19 <151> PRIOR FILING DATE: 2000-07-10
     21 <160> NUMBER OF SEQ ID NOS: 3
     23 <170> SOFTWARE: PatentIn version 3.0
     25 <210> SEQ ID NO: 1
     26 <211> LENGTH: 27
     27 <212> TYPE: DNA
                                                  invalid response (must be one or the other, not both)
See ever summary sheet, item 10
C--> 28 <213 > ORGANISM: (Artificial/Unknown
     30 <220> FEATURE:
     31 <221> NAME/KEY: primer_bind
     32 <222> LOCATION: (1)..(27)
     33 <223> OTHER INFORMATION: PCR primer, human-specific globin
     36 <400> SEQUENCE: 1
     37 gggcaaggtg aaggtgaacg tggatga
                                                                                  27
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     41 <211> LENGTH: 21
     42 <212> TYPE: DNA
C--> 43 <213> ORGANISM: Artificial/Unknown ____
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     46 <221> NAME/KEY: primer bind
     47 <222> LOCATION: (1)..(21)
     48 <223> OTHER INFORMATION: PCR primer, human-specific globin
     51 <400> SEQUENCE: 2
     52 ccatcactaa aggcaccgag c
                                                                                  21
     55 <210> SEQ ID NO: 3
     56 <211> LENGTH: 20
     57 <212> TYPE: DNA
C--> 58 <213> ORGANISM: Artificial/Unknown _
     60 <220> FEATURE:
     61 <221> NAME/KEY: primer_bind
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,826

62 <222> LOCATION: (1)..(20)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,826

DATE: 12/30/2002 TIME: 08:53:20

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF4\12302002\J088826.raw

63 <223> OTHER INFORMATION: PCR primer, human-specific globin

66 <400> SEQUENCE: 3

67 gtcaccagca ggcagtggct

20

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/088,826

DATE: 12/30/2002 TIME: 08:53:21

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF4\12302002\J088826.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:28 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1 L:43 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2

L:58 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3